

Exhibit B-1. Closure Cost Estimate Worksheet, Hazardous Waste Units, Safety-Kleen Systems, Inc. Service Center, Salt Lake City, UT (5/03) - Costs Updated for Inflation to 2016

		Activity	Category	Hourly Rate or Unit Charge	Hours or Unit Estimate	Subtotal (Includes 10% Markup for Subcontractors)
1.	PROJECT COORDINATION AND SCHEDULING					
	<u>Prime Contractor Costs</u>					
	- Obtain subcontractor quotes to implement closure activities	Project Manager		\$116	6	\$696
	- Coordinate scope and schedule of project activities with owner/operator, decontamination contractor, regulatory agencies and analytical laboratory	Project Manager		\$116	4	\$464
	- Review facility permit and closure plan	Project Engineer		\$99	6	\$594
		Field Supervisor		\$76	12	\$912
	- Prepare project/site specific Health and Safety Plan	Health/Safety Specialist		\$99	6	\$594
	- Participate in on-site coordination and orientation meeting with owner/operator and decontamination contractor	Project Manager		\$116	2	\$232
	- Prepare project activity and project status reports	Project Manager		\$116	4	\$464
	- Office Expenses			\$127	1	\$127
	- Miscellaneous Expenses			\$127	1	\$127
	Activity 1. Subtotal					\$4,210
2.	MOBILIZE TO SITE AND PREPARE FOR CLOSURE/CLOSURE OVERSIGHT					
	<u>Assumptions</u>					
	- Waste solvent tank is full (15,000 gallons)					
	- Permitted capacity of CSA (4,500 gallons), Return and Fill Station (224 gallons), and Flammable Materials Shelter (3,300 gallons) is 8,024 gallons (146 55-gallon drums)					
	- Waste solvent transported to Aragonite, UT. Unit cost is based on \$165 per 55-gallon drum, and \$0.06/pound of bulk waste parts washer solvent, and includes treatment and disposal.					
	- Generator knowledge used for disposal/treatment of waste solvent and spent antifreeze (i.e. no sampling required). However, 2 waste characterization samples are conservatively included.					
	- Waste haulers costs to transport drums to reclaimer based on RS Means. Documentation of unit costs provided in notes at the end of the cost estimate					
	- Prime Contractor per diem includes rental car, room and meals					
	- Subcontractor costs include labor and all expenses to complete each task					
	- Onsite closure activities completed in 7 working days, Project Engineer on site for 4 days for inspection/closure activities					
	<u>Owner/Operator Costs</u>					
	- Closure project supervision and oversight	Remediation Manager		\$5,063	LS	\$5,063
	<u>Prime Contractor Costs</u>					
	- Project Management and Supervision	Project Manager		\$116	2	\$232
	- Supervise waste loading activities	Field Supervisor		\$76	10	\$760
		Travel		\$949	1	\$949
		Per diem (all activities)		\$190	7	\$1,330
	- Collect representative waste characterization sample of drummed wastes	Field Supervisor		\$76	1	\$76
		Supplies/Shipping		\$190	1	\$190
	<u>Subcontractor Costs</u>					
	- Subcontractor mobilization/demobilization and licensing	Lump Sum		\$12,656	LS	\$13,922
	- Transfer tank contents to tankers	Foreman/labor/equipment		\$3,670	LS	4,037
	- Transport waste solvent to a TSD for treatment/disposal					
	Assumes 3 trucks to transport 15,000 gallons (5000 gallon/tanker)					
	Bulk Transportation at \$823/load	Bulk Transportation		\$823	3	\$2,469
	Tanker Washout Fee at \$253/load	Tanker Washout Fee		\$253	3	\$759
	15000 gallons = 120,000 pounds					
	Disposal at \$0.06/pound	TSD(cost per lb)		\$0.06	120000	\$7,200
	- Transfer drums in CSA to trucks	Foreman/labor/equipment		\$462	LS	\$508
	- Transport drums to TSD for Treatment/Disposal					
	Assumes 3 trucks to transport 146 drums (60/trailer)					
	Drum Transportation at \$499/load	Drum Transport		\$506	3	\$1,497
	Aragonite State Fees - fee structure has changed, but assume an equivalent cost	State Fees				\$3,615
	Estimated disposal/treatment cost (per drum) - \$162/drum	Disposal of drums		\$165	146	\$24,090
	<u>Laboratory Subcontractor Costs</u>					
	- Waste characterization sample analysis					
	Waste characterization analysis to consist of TCLP VOCs, SVOCs and Metals			\$794	2	\$1,588
	Activity 2. Subtotal					\$68,285
3.	STORAGE TANK DECONTAMINATION AND REMOVAL (1 Tank)					
	<u>Assumptions</u>					
	- Tank and appurtenant equipment are removed and scrapped					
	- Rinsate sampling is not necessary because the tanks will be scrapped					
	- Prime Contractor field supervisor travel is accounted for in above activity					
	- Prime Contractor per diem includes rental car, room and meals					
	- Assumes secondary containment removed					
	- Assumes collection of 2 soil samples from beneath waste solvent containment area is necessary					
	- Subcontractor costs include labor and all expenses to complete each task					
	<u>Prime Contractor Costs</u>					
	- Project Management and Supervision	Project Manager		\$116	4	\$464
	- Supervise Storage Tank Decontamination and Removal Activities	Field Supervisor		\$76	20	\$1,520
	- Inspect Secondary Containment	Project Engineer		\$99	4	\$396
		Travel		\$949	1	\$949
		Per diem		\$190	4	\$760
	- Collect soil samples	Field Supervisor		\$76	4	\$304
		Sample supplies/shipping		\$190	LS	\$190
	<u>Subcontractor Costs</u>					
	- Disconnect electrical appurtenances	Labor/equipment		\$570	LS	\$627
	- Decontaminate 1 waste AST, 80' piping and Containment Area	Foreman/labor/equipment		\$2,658	LS	\$2,924
	Wash/triple rinse tank, piping and containment with high pressure spray					
	Remove wash/rinse water, containerize in drums					
	Cost for transportation and wash water disposal included in activity 8 below					
	- Demolish 1 AST and piping, haul for remelt	Foreman/labor/equipment		\$2,215	LS	\$2,437
	- Demolish Containment Area, load concrete for disposal/recycling	Foreman/labor/equipment		\$8,227	LS	\$9,050
		Disposal/Recycling (26 cubic yards)		\$20	YD	\$572
	<u>Laboratory Subcontractor Costs</u>					
	- Analyze 2 soil samples for VOCs, SVOCs, and Metals					
		VOCs @ \$127/sample				
		SVOCs @ \$266/sample				
		Metals @ \$114/sample				
		EnCore Sample Container @ \$30/sample x 2/sample				
		Total per sample cost		\$567	2	\$1,247
	Activity 3. Subtotal					\$21,440

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4.	DECONTAMINATE ONE CONTAINER STORAGE AREA				
	<u>Assumptions:</u>				
	- CSA located inside warehouse and consists of a concrete slab floor with curbing and trench and is approximately 840 sq. ft.				
	- Decontamination shall consist of washing with a high-pressure detergent/water solution and triple rinsing with tap water				
	- CSA to remain in-place following closure				
	- Prime Contractor project engineer and field supervisor travel accounted for in above activities				
	- Prime Contractor per diem includes rental car, room and meals				
	- Assumes up to 2 soil samples will be collected from beneath the CSA				
	- Field supervisor qualified to collect soil and rinsate samples				
	- Subcontractor costs include labor and all expenses to complete each task				
	<u>Prime Contractor Costs</u>				
	- Inspect the floor of CSA for cracks, gaps, or other potential lapses of integrity	Project Engineer	\$99	2	\$198
	- Fill cracks and gaps (if necessary) prior to implementing decontamination	Field Supervisor	\$76	2	\$152
	- Supervise and document decontamination of CSA	Field Supervisor	\$76	6	\$456
	- Collect sample of final rinsate from CSA, submit for laboratory analysis	Field Supervisor	\$76	2	\$152
	- Core through concrete at 2 locations beneath CSA	Field Supervisor Equipment	\$76 \$127	2 day	\$152 \$127
	- Collect 2 soil samples beneath CSA for analysis of VOCs, SVOCs and metals	Field Supervisor Sample supplies/shipping	\$76 \$380	4 LS	\$304 \$380
	<u>Subcontractor Costs</u>				
	Decontaminate 1 container storage area	Foreman/labor/equipment	\$1,139	LS	\$1,253
	Assumes decontamination with detergent/water solution, and scrubbing with brooms, mops, etc., and triple rinsing with high pressure spray. Wash/rinse water containerized and transferred to drums				
	Cost for transportation and disposal of drums included in Activity 8 below.				
	<u>Laboratory Subcontractor Costs</u>				
	- Analyze 1 rinsate sample for VOCs and SVOCs	VOCs @ \$127/sample SVOCs @ \$253/sample Total per sample cost	\$380	1	\$418
	- Analyze 2 soil samples for VOCs, SVOCs and Metals	VOCs @ \$127/sample SVOCs @ \$266/sample Metals @ \$114/sample EnCore Sample Container @ \$30/sample x 2/sample Total per sample cost	\$567	2	\$1,247
	Activity 4. Subtotal				\$4,839
5.	DECONTAMINATE THE RETURN/FILL STATION				
	<u>Assumptions:</u>				
	- Washing shall consist of a high-pressure detergent/water solution and triple rinsing with tap water				
	- The R/F structure, including the dumpsters/drum washers will be saved for reuse				
	- Drum washers shall be removed from the R/F and staged within the warehouse				
	- Rinsate sample required for drum washers (2) and secondary containment (3 total) for VOCs and SVOCs				
	- Assumes up to 2 soil samples will be collected from beneath the return/fill containment area				
	- Prime Contractor project engineer and field supervisor travel and per diem accounted for in above activities				
	- Prime Contractor per diem includes rental car, room and meals				
	- Subcontractor costs include labor and all expenses to complete each task				
	<u>Prime Contractor Costs</u>				
	- Supervise and document removal of residual sludges (if necessary)	Field Supervisor	\$76	4	\$304
	- Supervise washing of R/F Station and associated components (i.e. piping, pumps, and appurtenanc	Field Supervisor	\$76	8	\$608
	- Inspect containment and document with field notes and photographs	Project Engineer	\$99	2	\$198
	- Collect rinsate samples for analysis of VOCs and SVOCs	Field Supervisor Sample supplies/shipping	\$76 \$190	2 LS	\$152 \$190
	<u>Subcontractor Costs</u>				
	- Remove residual sludge from drum washers, decontaminate drum washers, grating, containment and structure	Foreman/labor/equipment	\$3,670	LS	\$4,037
	Assumes decontamination with detergent/water solution, and scrubbing with brooms, mops, etc., and triple rinsing with high pressure spray. Wash/rinse water containerized and transferred to drums				
	Cost for transportation and disposal of drums included in Activity 8 below.				
	<u>Laboratory Subcontractor Costs</u>				
	- Analyze 3 rinsate sample for VOCs and SVOCs	VOCs @ \$127/sample SVOCs @ \$253/sample Total per sample cost	\$380	3	\$1,254
	- Analyze 2 soil samples for VOCs, SVOCs and Metals	VOCs @ \$127/sample SVOCs @ \$266/sample Metals @ \$114/sample EnCore Sample Container @ \$30/sample x 2/sample Total per sample cost	\$567	2	\$1,247
	Activity 5. Subtotal				\$7,990

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	Activity	Category	Hourly Rate or Unit Charge	Hours or Unit Estimate	Subtotal (Includes 10% Markup for Subcontractors)
6.	DECONTAMINATE FLAMMABLE MATERIALS STORAGE SHELTER				
	Assumptions:				
	- Flammable materials storage shelter consists of a metal structure with elevated grating and metal containment pans.				
	- Decontamination shall consist of washing with a high-pressure detergent/water solution and triple rinsing with tap water				
	- Flammable materials storage shelter each to remain in-place following closure				
	- Prime Contractor project engineer and field supervisor travel accounted for in above activities				
	- Prime Contractor per diem includes rental car, room and meals				
	- Assumes up to 2 soil samples will be collected from beneath the flammable materials storage shelter				
	- Field supervisor qualified to collect soil and rinsate samples				
	- Subcontractor costs include labor and all expenses to complete each task				
	<u>Prime Contractor Costs</u>				
	- Inspect the floor of the Flam Shed for cracks, gaps, or other potential lapses of integrity	Project Engineer	\$116	2	\$232
	- Fill cracks and gaps (if necessary) prior to implementing decontamination	Field Supervisor	\$76	2	\$152
	- Supervise and document decontamination of Flam Shed	Field Supervisor	\$76	6	\$456
	- Collect sample of final rinsate from Flam Shed, submit for laboratory	Field Supervisor	\$76	2	\$152
	- Core through concrete at 2 locations beneath Flam Shed	Field Supervisor Equipment	\$76 \$127	2 day	\$152 \$127
	- Collect 2 soil samples for analysis of VOCs, SVOCs and metals	Field Supervisor Sample supplies/shipping	\$76 \$380	4 LS	\$304 \$380
	<u>Subcontractor Costs</u>				
	Decontaminate 1 Flammable Materials Storage Shelter	Foreman/labor/equipment	\$2,658	LS	\$2,924
	Assumes decontamination with detergent/water solution, and scrubbing with brooms, mops, etc., and triple rinsing with high pressure spray. Wash/rinse water containerized and transferred to drums				
	Cost for transportation and disposal of drums included in Activity 8 below.				
	<u>Laboratory Subcontractor Costs</u>				
	- Analyze 1 rinsate sample for VOCs and SVOCs	VOCs @ \$127/sample SVOCs @ \$253/sample Total per sample cost	\$380	1	\$418
	- Analyze 2 soil samples for VOCs, SVOCs and Metals	VOCs @ \$127/sample SVOCs @ \$266/sample Metals @ \$114/sample EnCore Sample Container @ \$30/sample x 2/sample Total per sample cost	\$567	2	\$1,247
	Activity 6. Subtotal				\$6,544
7.	DECONTAMINATE CLEANUP EQUIPMENT (If Necessary)				
	Assumptions:				
	- Decontamination of Cleanup Equipment is not anticipated to be necessary. Equipment used to remove waste units will only be used following decontamination of the unit (i.e. equipment will not come into contact with hazardous waste). Other cleanup equipment such as pressure washers will be cleaned during decontamination of each respective unit.				
	- If performed, washing of cleanup equipment shall consist of a high-pressure detergent/water solution and triple rinsing with tap water				
	<u>Prime Contractor Costs</u>				
	- Supervise washing of cleanup equipment	Field Supervisor	\$76	4	\$304
	<u>Subcontractor Costs</u>				
	- Construct decon area with 6ml plastic sheeting and 4" absorbent berm	Foreman/labor/equipment	\$633	LS	\$696
	- Decontaminate cleanup equipment				
	Assumes decontamination with detergent/water solution, and scrubbing with brooms, mops, etc., and triple rinsing with high pressure spray. Wash/rinse water containerized and transferred to drums				
	Cost for transportation and disposal of drums included in Activity 8 below.				
	Activity 7. Subtotal				\$1,000
8.	CONTAINERIZE, STAGE, TRANSPORT AND DISPOSE OF DECONTAMINATION WASTES				
	Assumptions:				
	- 1000 gallons wash water generated from decontamination of waste AST, piping and secondary containment (including residual sludge) = 18 drums				
	- 1000 gallons of wash water generated from decontamination of CSA = 18 drums				
	- 500 gallons of wash water generated from decontamination of return/fill station and drum washer = 9 drums				
	- 224 gallons sludge removed from drum washer (included in above drum count)				
	- 250 gallons of wash water generated from decontamination of both Flammable Materials Storage Shelter = 5 drums				
	- PPE, plastic sheeting, disposable cleanup equipment, consumables, etc. contained in 4 drums				
	- Waste characterization samples not necessary for wash/water disposal (wash water from solvent tank, R/F and containment disposed as hazardous waste solvent, CSA wash water also disposed as hazardous waste)				
	<u>Prime Contractor Costs</u>				
	- Ensure drums are properly labeled, coordinate pick up and disposal	Project Manager	\$116	4	\$464
	- Purchase 54 55-gallon drums	Drums @ \$44 each	\$44	54	\$2,614
	<u>Subcontractor Costs</u>				
	- Transfer drums of decon waste to trucks	Foreman/labor/equipment (no charge, included in above costs)	0	LS	0
	- Transport drums to TSD for Treatment/Disposal				
	Assumes 1 truck to transport 54 drums (60/trailer)				
	Drum Transportation at \$506/load	Drum Transport	\$506	1	\$506
	Estimated disposal/treatment cost (per drum) - \$165/drum	Disposal of drums	\$165	54	\$8,910
	Activity 8. Subtotal				\$12,494

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	Activity	Category	Hourly Rate or Unit Charge	Hours or Unit Estimate	Subtotal (Includes 10% Markup for Subcontractors)
9.	CLOSURE CERTIFICATION REPORT				
	Assumptions:				
	- CLOSURE CERTIFICATION REPORT certified by an Utah-registered PE and S-K				
	<u>Prime Contractor Costs</u>				
	- Compile field notes and photographs	Project Manager	\$116	2	\$232
		Project Engineer	\$99	2	\$198
	- Compile rinsate and soil sample data into summary tables	Project Manager	\$116	4	\$464
		Project Engineer	\$99	8	\$792
	- Draft Closure Certification Report	Project Manager	\$116	8	\$928
		Project Engineer	\$99	16	\$1,584
	- Prepare closure certification statement	Sr. Project Engineer	\$146	2	\$292
	- Office Expenses	Drafting/Clerical	\$506	1	\$506
	- Miscellaneous Expenses	Copying/Postage	\$127	1	\$127
	Activity 9. Subtotal				\$5,123
COST ESTIMATE ACTIVITIES SUMMARY					
1.	PROJECT COORDINATION AND SCHEDULING				\$4,210
2.	MOBILIZE TO SITE AND PREPARE FOR CLOSURE/CLOSURE OVERSIGHT				\$68,285
3.	STORAGE TANK DECONTAMINATION AND REMOVAL (1 Tank)				\$21,440
4.	DECONTAMINATE ONE CONTAINER STORAGE AREA				\$4,839
5.	DECONTAMINATE THE RETURN/FILL STATION				\$7,990
6.	DECONTAMINATE FLAMMABLE MATERIALS STORAGE SHELTER				\$6,544
7.	DECONTAMINATE CLEANUP EQUIPMENT (if Necessary)				\$1,000
8.	CONTAINERIZE, STAGE, TRANSPORT AND DISPOSE OF DECONTAMINATION WASTES				\$12,494
9.	CLOSURE CERTIFICATION REPORT				\$5,123
	TOTAL CLOSURE COST ESTIMATE				\$131,925

Notes:

- Prime Contractor Rates obtained from TriHydro Corporation 2003 Schedule of Charges
- Subcontractor prices provided by Evans Environmental Construction, Glenwood, Iowa
- 10% markup on prime contractor, construction, and analytical contractor costs. No markup on disposal costs at Aragonite.
- Laboratory Subcontractor Rate Obtained From Analytical Service, Inc. (Norcross, Georgia) Schedule of Charges
- Waste solvents and drummed waste treatment/disposal unit cost obtained from Clean Harbors Aragonite, Utah Facility at \$165 per 55 gallon drum, and \$0.06/pound for bulk solvent.